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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/640,126 08/16/00 DIEKHANS

N 3869/59156-0

EXAMINER

PM92/0131

ROBERT E MUIR
HUSCH & EPPENBERGER LLC
401 MAIN STREET
SUITE 1400
PEORIA IL 61602-1241

PETRAVICK, M

ART UNIT

PAPER NUMBER

3671

DATE MAILED:

01/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/640,126

Applicant(s)

DIEKHANS, NORBERT

Examiner

Meredith C Petravick

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 15 recites the limitation “means for restricting the possible adjustment ranges by predetermined limiting values.” However, no examples of the type of means used or a description of the means is given in the specification. The specification only states that provisions are made to prevent the adjustment of the sieve beyond limiting values (page 7, line 23-28). Since it is not obvious to one of ordinary skill in the art what the means would be and the specification does not provide a description, the specification would not enable one skilled in the art to make the invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1 recites the limitation "the threshing and separating mechanisms" in line 3. Claim 3 recites the limitation "the feeder housing" in line 2. Claim 16 recites the limitation "the threshing and separating mechanisms" in line 3. Claim 17 recites the limitation "the threshing and separating mechanisms" in line 2. There is insufficient antecedent basis for these limitations in the claims since these limitations were not previously positively recited in the claims.

6. Claim 15 contains the limitation "means for restricting the possible adjustment ranges by predetermined limiting values." However, the specification fails to provide examples or a description for the above means. Therefore, the claim is unclear since the equivalents of the means can not be determined from the limitation.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-2, 4-6, 8-12, 13 and 16-17 rejected under 35 U.S.C. 102(e) as being anticipated by Watt et al. 5,995,895 (Watt).

Watt discloses the claimed device on a combine harvester including a cleaning mechanism (46):

- sieves (48, 52)
- an adjustable fan (50)
- a member for adjusting the opening widths of the sieve (36)
- a sensor (80)

The sensor delivers a measuring signal to the member for adjusting the sieve and the rotation speed of the fan. (column 14, lines 14-22 and 31-38) The signal is dependent on the loading of the combine harvester but independent of the setting of the cleaning mechanism. A controller then sends a signal to adjust the widths of the sieve.

In regards to claims 4-6, the sensor receives a signal that measures the anticipated moisture content of the straw (column 11, lines 10-11), the amount of crop harvested (column 7, lines 29-34), or the ground speed of the combine harvester (column 10, lines 39-44).

In regards to claims 8-10, the harvester uses tables to determine the desired setting. (column 10, lines 61-65)

In regards to claim 12, the harvester includes means for altering the programmed function and the stored dependencies (100).

In regards to claim 13, the harvester has more than one sieve.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Kruse et al. 4,487,002 (Kruse).

Watt discloses the claimed device except for the sensor detecting the amount of straw in the feeder housing of the combine harvester.

Like Watt, Kruse discloses an automated combine harvester, which detects the load of the crop in the harvester. Kruse uses a sensor on the feeder to determine the amount of crop entering the harvester.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the sensor of Watt a sensor which measures the amount of crop entering the harvester from the feeder as in Kruse, as an alternate type of sensor which determines the load of the crop in the harvester.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Herlitzius et al. 5,775,072 (Herlitzius), cited by applicant.

Watt discloses the claimed invention except for making the setting of the opening width of the sieve device dependent on the rotational speed of the fan.

Like Watt, Herlitzius also discloses a control system for a combine harvester with an adjustable sieve and fan. Herlitzius teaches that in order to optimally clean the grain the sieve openings have to be optimally arranged in dependence on the rotational speed of the fan. (column 3, lines 16-26)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to control the sieve opening in dependent relation to the fan speed as taught in Herlitzius, in order to optimize the cleaning of the grain.

6. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt.

Watt discloses the claimed device except for having four independently controlled sieves instead of two. The number of sieves that are independently controlled is an obvious design choice. Since the invention is a control system that on a combine harvester, it would be well within the ordinary skill of one in the art to control any number of sieves that happened to be on a type of harvester with the control system.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Hofer 6,117,006.

Watt discloses the claimed device except means for restricting the possible adjustment ranges by predetermined limiting values.

Like Watt, Hofer discloses an adjustable sieve. The sieve is adjustable within a finite range. This prevents the sieve from being fully closed or fully open.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the adjusting sieve of Watt with a means for restricting the possible adjustment ranges of the sieve openings as taught in Hofer, in order to prevent the sieve from being fully closed or fully open.

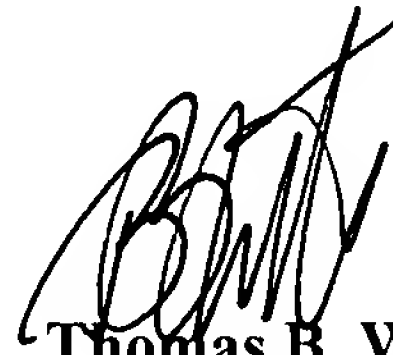
Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meredith Petravick whose telephone number is 703-305-0047. The examiner can normally be reached on Monday-Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-305-3597.



Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

MCP
January 26, 2001